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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/664,500	09/18/2000	John W. Bates	1942.0030000	4605

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EXAMINER

STEVENS, ROBERTA A

ART UNIT PAPER NUMBER

2665

DATE MAILED: 03/26/2004

*S*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/664,500

Applicant(s)

BATES ET AL.

Examiner

Roberta A Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4, 6-11, 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Burton (U.S. 6633962 B1).

3. Regarding claim 1, Burton teaches (figures 1 and 3) a storage area network; at least one server; a plurality of storage devices; and a storage allocator, connected between the server and the plurality of storage devices, storage allocator including a read/write storage request parser that receives a read/write storage request from the server, wherein the parser extracts at least one request parameter from the received request; and a LUN mapper that receives the request parameter and maps the parameter to at least one physical LUN, wherein the physical LUN represents at least one storage location within the plurality of storage devices (columns 4-6).

4. Regarding claim 2, Burton teaches (figure 3) the LUN mapper comprises at least one LUN map.

5. Regarding claim 3, Burton teaches (columns 4-6) the storage request parameter comprises a host ID parameter, a target LUN parameter, and a target HBA parameter.

6. Regarding claim 4, Burton teaches (figure 3 and columns 4-6) the LUN mapper uses the host ID parameter to select one of the LUN map corresponding to the host ID parameter.

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7. Regarding claims 5, 11 and 16, Burton teaches (columns 4-6) the LUN mapper applies the target LUN and the target HBA to the selected LUN map to locate the physical LUN in the LUN map.
8. Regarding claim 6, Burton teaches (columns 5-6) the LUN mapper issues the received request to at least one storage device corresponding to one physical LUN, wherein the storage device is located in the plurality of storage devices.
9. Regarding claim 8, Burton teaches (figures 1 and 3 and columns 4-6) a method for allocating storage area network, comprising, receiving a read/write storage request from a host computer; resolving the request; determining a physical LUN from the resolved request; and issuing a read/write storage request to a storage device in a storage area network, wherein the storage device correspond to the determined physical LUN.
10. Regarding claim 9, Burton teaches (figures 3 and columns 4-6) extracting parameters of a host ID, a target LUN, and target HBA from the request.
11. Regarding claim 10, Burton teaches (column 4) storing at least one LUN map.
12. Regarding claim 13, Burton teaches (figures 1 and 3 and columns 4-6) a system for allocating storage area network, comprising, means for receiving a read/write storage request from a host computer; resolving the request; means for determining a physical LUN from the resolved request; and means for issuing a read/write storage request to a storage device in a storage area network, wherein the storage device correspond to the determined physical LUN.
13. Regarding claim 14, Burton teaches (figures 3 and columns 4-6) means for extracting parameters of a host ID, a target LUN, and target HBA from the request.

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14. Regarding claim 115, Burton teaches (column 4) means for storing at least one LUN map.

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 7, 12 and 17 are rejected under 35 U.S.C. 103(a) as being obvious over Burton.

17. As mentioned above Burton teaches all of the limitations of claims 1 and 5.

18. Burton does not teach a LUN map with one axis as target LUN information and the other axis as target HBA information. However, it would have been obvious to one of ordinary skill in the art to adapt to Burton's system this map configuration to ensure quality of service within the system.

***Conclusion***

19. Any inquiry concerning the communication or earlier communications from the examiner should be directed to Roberta Stevens whose telephone number is (703) 308-6607. The examiner can normally be reached on Monday through Friday from 9:00 am to 5:30 p.m.

20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached on (703) 308-6602.

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21. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

22. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231 or faxed to: (703) 872-9306

For informal draft communications, please label "PROPOSED" or "DRAFT"

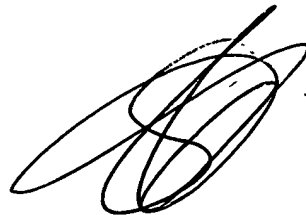
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA. Sixth Floor (Receptionist).

Roberta A. Stevens

Patent Examiner

03-17-04

A handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the left.

STEVEN H. D NGUYEN  
PRIMARY EXAMINER